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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,032	05/28/2002	Horea-Stefan Culca	521.1014	7295
23280	7590	12/02/2005		
DAVIDSON, DAVIDSON & KAPPEL, LLC 485 SEVENTH AVENUE, 14TH FLOOR NEW YORK, NY 10018			EXAMINER ETTEHADIEH, ASLAN	
			ART UNIT 2637	PAPER NUMBER

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/070,032	<b>Applicant(s)</b> CULCA, HOREA-STEFAN	
	<b>Examiner</b> Aslan Ettehadieh	<b>Art Unit</b> 2637	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 5/28/2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 5-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8 is/are allowed.
- 6) ☒ Claim(s) 5-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 May 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/18/2001</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Specification*

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 5, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. (US 6247082) in view of Barrett et al. (US 5584033).
3. Regarding claim 5, Lo discloses a data transmission device (col. 4 lines 48 – 50) for serial (col. 1 line 30) synchronous (col. 2 line 32) data transmission comprising:  
a master device including a first arithmetic unit (figure 2 element 100a) and a master interface (figure 2 element 110a); and  
a slave device including a second arithmetic unit (figure 2 element 100b) and a slave interface (figure 2 element 110b); wherein:  
the master and slave interfaces are capable of being connected via at least one data transmission line (figure 2 element 150) and a clock signal line (figure 2 element 124);  
the master and the slave interfaces are capable of being connected via a  
acknowledgment signal line (figure 2 element 126) configured for a transmission of an  
acknowledgment signal from the slave device to the master device (col. 5 lines 64 – 65);

the second arithmetic unit is capable of generating the acknowledgment signal upon completion of a data reading operation (col. 3 line 66 – col. 4 line 6); and the first arithmetic unit is configured so that a capability of the master device to initiate a further write operation to the slave device is dependent upon a receiving of the acknowledgment signal from the slave device (col. 8 line 38). Lo is silent about master device to initiate a further write operation to the slave device.

In the same field of endeavor, however, Barrett discloses master device to initiate a further write operation to the slave device (col. 7 lines 22 – 25).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use master device to initiate a further write operation to the slave device as taught by Barrett in the system of Lo to provide efficiency in the system without interruptions in communication between devices.

4. Regarding claim 6, Lo discloses a at least one data transmission line is a single bidirectional data transmission line (figure 2 element 150; where the single communication line shows directional arrows on both ends showing a bidirectional (two directional) type of transportation)

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. (US 6247082) in view of Barrett et al. (US 5584033) in further view of Siu et al. (US 5528215).

6. Regarding claim 7, Lo discloses the at least one data transmission line includes a first and a second unidirectional data transmission line (col. 4 lines 53 – 55). Lo is silent about a unidirectional data transmission line.

In the same field of endeavor, however, Siu discloses a unidirectional data transmission line (col. 6 lines 22 – 27).

Therefore it would have been obvious to one skilled in the art at the time of invention was made to use a unidirectional data transmission line as taught by Siu in the system of Lo because bidirectional transmission lines use time to set up the direction of transmission and are susceptible to data collision where unidirectional transmission provides for more efficient and reliable data transfer.

***Allowable Subject Matter***

7. Claim 8 is allowed.

8. The following is a statement of reasons for the indication of allowable subject matter: the combination of steps in activating and deactivating in transmission of bits of data between master and slave devices comprising applying multiple interference suppression measures between master and slave devices and the master device receiving a second acknowledgement signal after a fifth slave-master transmission delay with initiating a last cycle using a master device by transmitting a last transmit bit; deactivating the clock signal and reading a receive bit of a previous cycle while applying a fifth interference suppression measure as recited in the independent claim 8 and in combination with other elements of the claim.

***Other prior art cited***

The prior art made of record and not relies upon is considered pertinent to applicant's disclosure.

9. Uchiba et al. (US 6912210) discloses a system with a master and slave device communications, data read/write request, and acknowledgement (col 4 lines 23 – 40).

10. Kelly et al. (US 6178206) discloses a system with two components (being interpreted as a master and slave) with a clock and a data line, that provide synchronization for serial communications with a read operation (figure 1).

### ***Contact Information***

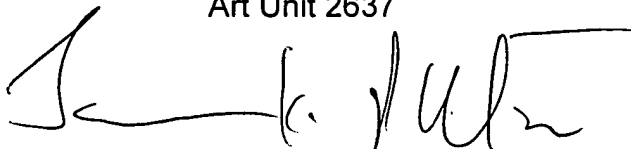
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aslan Ettehadieh whose telephone number is (571) 272-8729. The examiner can normally be reached on Monday - Friday, 8:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AE

Aslan Ettehadieh  
Examiner  
Art Unit 2637



JAY K. PATEL  
SUPERVISORY PATENT EXAMINER